

Attitude of Secondary School Students towards Online Education during Covid-19 in West Bengal

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ABSTRACT

In the present study the investigator attempted to find out the secondary students' attitude towards online education in West Bengal. 240 secondary school students were taken as a representative sample of the whole population. For selecting higher secondary students as a sample, the purposive sampling method was adopted. The investigator has adopted the survey research method for this study. A self-made attitude scale consists of 40 items was developed and used for collecting the data. For analyzing and interpreting the data the investigator used to mean, S.D, t-test, ANOVA. The study revealed that there is no significant difference in attitude between male and female students towards online education. The study also revealed that there is a significant difference in attitude towards online education concerning their locality and stream of study.

KEYWORDS: Attitude, Online Education, Secondary Students, Covid-19, etc

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INTRODUCTION

Covid-19 has affected every aspect of our life very deeply. Education is one of them, which has been extremely affected. Educational department all over the world has been very much impacted by covid-19. As one of the main contrivances to prevent covid-19 is maintaining physical or social distancing, we can't carry on our conventional classroom system. In the last ten months, schools, colleges, universities have been closing in India especially in West Bengal. Students have not been participating in conventional classes since March 2020. So, as a substitute method, students are relying on Online Education. Online education or online learning is a vast term. There are several forms of online education, which have been used during covid-19 in schools of West Bengal, such as using various online video meeting applications like Zoom, Google-meet, etc, doing google, even using WhatsApp.

Now a day blended learning has been considered the new normal method of education. According to Cambridge Dictionary blended learning is "a way of learning that combines traditional classroom lessons with lessons that use computer technology and may be given over the internet." In this method, the teachers are taking classes over the internet and students have submitted their assignments and any other projects at school. During this pandemic situation, blended learning has been very popular.

The researcher has wanted to investigate the perceptions of higher secondary school students regarding online education during covid-19. So, the researcher has selected higher secondary students of West Bengal as a population and has surveyed them to study their attitude towards online education.

CONCEPT OF ONLINE EDUCATION:

Online education is a flexible instructional delivery system that encompasses any kind of learning that takes place via the internet.(Encyclopedia.com)

Simply, online education is a form of education, where teaching-learning takes place using the internet. It is also called E-learning.

Online education refers to the process of taking a course, earning a degree, or participating in any other kind of educational endeavor via internet connection rather than in person.(Ashley Friedman, 2019)

SIGNIFICANCE OF THE STUDY:

During the covid-19 pandemic, online education is the main alternative method for the continuation of the educational process. So, we have to understand the students' perception

of online education. One of the main objectives of this present study is to understand if the students taking online classes positively or not. Because we know, there are many barriers to online education. If students have not a positive attitude towards online education, we have to think about the alternative. The findings of the study will help the teachers, educationists, educational leaders to realize higher secondary students' attitudes regarding online education. And also, this study will stimulate other researchers to carry out this type of research work in the future.

REVIEW OF RELATED STUDIES:

Gupta and Sharma (2018) conducted a study to find out the attitude of senior secondary students towards e-learning in relation to their gender, residential backward, and the nature of the school. The findings presented that male students had a greater attitude towards e-learning than female students. With relation to residential backward had no significant difference in attitude and also, according to the stream of study had no significant difference in attitude.

Paris, P. (2004) carried out an investigation entitled 'E-learning: a study on secondary students' attitude towards online web-assisted education'. He discovered that some students engaged and accepted the use of online web-assisted learning(owal) to supplement their learning, if not at school, then at home. The data indicated that owal would aid in the learning process of students because students had a positive attitude towards the use of OWAL.

Konwar, I. (2017) examined college students' attitude towards e-learning with special reference to North Lakhimpur of Lakhimpur District of Assam. The researcher used a five-point Likert type scale developed by Dimpal Rani to collect the data. The findings from that study were the attitude of college students towards e-learning was independent concerning gender and locality. The study suggested that it had a greater probability of e-learning that they would accept it. Investigator concluded that college students were ready to take the opportunity of online learning mode.

Nachimuthu, K. (2020) researched 'student teacher's attitude towards online learning during covid-19'. The researcher observed that there is no significant difference in attitude between male and female students towards online teaching. He found a significant difference in attitude between private and government student teachers towards online teaching and also noticed a significant attitude between science and arts stream towards online teaching.

Ullah et. al. (2017) explored students' attitudes towards online learning at the tertiary level. And the result showed that no significant relationship between the interests' level of students in computer and the acquisition of knowledge through online learning at the undergraduate level.

STATEMENT OF THE PROBLEM:

After studying the previous review literature, the investigator found the research gap and he selected the problem as "Attitude of secondary school students towards online education during covid-19". The present study was driven to find out if there any difference in attitude towards 'online education' of students in relation to their 'gender', 'locality', and 'stream of study' during COVID-19 in West Bengal. So, the researcher has entitled the study as "**Attitude**

of secondary school students towards online education during covid-19 in West Bengal".

OBJECTIVES OF THE STUDY:

The present study was carried out to achieve the following objectives-

- To find out the attitude of secondary school students towards online education.
- To identify the difference in the attitude of secondary students towards online education concerning their gender.
- To study the difference in the attitude of secondary students towards online education concerning their locality.
- To explore the difference in the attitude of secondary students towards online education concerning their stream of study.
- To determine the difference in the attitude of secondary students towards online education concerning their gender, locality, and stream of study.

HYPOTHESIS OF THE STUDY:

The following hypothesizes were selected for the present study-

- H₁: There is significant difference in attitude towards online education between boys' and girls' students of secondary school.
- H₂: There is significant difference in attitude towards online education between rural and urban students of secondary school.
- H₃: There is significant difference in attitude towards online education between the arts and science stream of education of secondary school.
- H₄: There is significant difference in attitude towards online education among gender, locality, and stream of study of higher school students.

DELIMITATION OF THE STUDY:

Area of study: The sample of the present study was taken from Murshidabad and Nadia District only.

Sample size: Only 240 samples were studied during the investigation.

Tools: The researcher used a close-ended questionnaire only for this study.

Statistics Used: For this study the researcher used Mean, SD, t-test, and ANOVA.

The present research work was delimited to the higher secondary school students only (11th and 12th class).

And also, the study was delimited to the Arts and Science stream of study only.

OPERATIONAL DEFINITION OF KEY TERMS:

Attitude: Attitude is one kind of feeling by which a person positively or negatively judges something or someone. Attitude is always organized towards something or someone.

According to **Colesnick** "An attitude is an emotionally toned predisposition to act in a certain way toward a person, object, an idea, or a situation."

Online Education: Online Education is a form of education delivered through the help of the internet. According to IndiaEducation.net "Online Education has electronically supported learning that relies on the internet for teacher/student interaction and the distribution of class materials."

Secondary Students: By secondary students we mean a student of class 11th and 12th. After qualifying Madhyamik Examination a student takes admission to secondary level, specifically higher secondary level.

METHODOLOGY:

Research Method:

As a research method, the researcher adopted the Descriptive Survey Method as well as the quantitative research approach for this present study.

According to Gravetter and Forzano, "a research study that uses a survey to obtain a description of a particular group of individuals is called a survey research design".

According to Creswell "survey research designs are procedures in quantitative research in which investigators

administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population. In this procedure, survey researchers collect quantitative, numbered data using questionnaires (e.g., mailed questionnaires) or interviews (e.g., one-on-one interviews) and statistically analyze the data to describe trends about responses to questions and to test research questions or hypotheses." (Creswell, 2012)

Population:

All the secondary (particularly higher secondary) students (class 11th & 12th) of West Bengal (India) are the targeted population of the study.

Sample and Sampling:

A total number of 240 subjects were selected as a sample. The researcher used the purposive sampling technique for this present investigation. The researcher collected data from 140 samples in the rural area (Panchayat) and 100 samples in the urban area (Municipality). Out of 240 samples, 130 were male students and 110 were female students.

Sample Profile:

Table No 1: Sample distribution according to various independent variables

Independent Variables		N		Percentage
Gender	Male	130	240	54.1
	Female	110		45.9
Locality	Rural	137	240	57
	Urban	103		43
Stream of Study	Arts	145	240	60.41
	Science	95		39.59
		Total = 240		

Tools:

We collect the research data with the help of research tools. So, it is a very important element of research. The researcher prepared a close-ended questionnaire for higher secondary students to study the attitude towards online education. The questionnaire is a Likert type scale, which consists of 40 items. The questionnaire was standardized with the help of the test-retest reliability method. The coefficient of correlation was 0.77. A sample questionnaire is given in table no-1.

Table No 2: Sample Items for measuring student s' attitude towards online education

Sl. No.	Statement	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1.	I like online classes more than conventional classes.					
2.	Online education is costly.					
3.	It is very easy to take classes on online,					
4.	I miss my friends during online classes.					
5.	We can learn at our own pace with the help of online education.					

TESTING THE HYPOTHESIS:

Hypothesis-1:

H₀₁: There is no significant difference in attitude towards online education between boys' and girls' students of secondary school.

Table No 3: Attitude towards online education between boys' and girls' students of secondary school

Groups	N	Mean	S.D.	Mean Difference	S _{ED}	df	't' value	Level of Significance
Male Students	130	162.93	19.18	0.767	2.62	238	0.292	Not significant at both level
Female students	110	162.163	21.13					

Analysis: The researcher found from the 't-table' that the critical value of t with 238 degrees of freedom(df) at a 5% level of significance is 1.97 and the 1% level of significance is 2.60. Our calculated value of 't' is 0.292. Since 0.292 is less than 1.97 ($0.292 < 1.97 & 2.60$), the difference between the two groups is not significant at 0.01 and 0.05 levels.

Interpretation: Hence, the null hypothesis (H_{01}) is accepted and the alternative hypothesis is rejected. It means that there is no significant difference in attitude towards online education between boys' and girls' students of secondary school.

Hypothesis-2:

H₀₂: There is no significant difference in attitude towards online education between rural and urban students of secondary school.

Table No 4: Attitude towards online education between rural and urban students of secondary school.

Groups	N	Mean	S.D.	Mean Difference	SED	df	't' value	Level of significance
Rural Students	137	160.64	18.99	7.45	2.34	238	3.183	Significant at both 5% and 1% level
Urban Students	103	168.09	17.16					

Analysis: The researcher found from the 't-table' that the critical value of t with 238 degrees of freedom(df) at a 5% level of significance is 1.97 and the 1% level of significance is 2.60. Our calculated value of 't' is 3.183. Since 3.183 is greater than 2.60 ($3.183 > 1.97 & 2.60$) the difference between the two groups is significant at both 0.01 and 0.05 levels.

Interpretation: Hence, the null hypothesis (H_{02}) is rejected and the alternative hypothesis is accepted. It means that there is a significant difference in attitude towards online education between rural students and urban students of secondary school. Urban students have a greater positive attitude than rural students towards online education.

Hypothesis-3:

H₀₃: There is no significant difference in attitude towards online education between the arts and science stream of education of secondary school.

Table No 5: Attitude towards online education between the arts and science stream of education of secondary school

Groups	N	Mean	S.D.	Mean Difference	SED	df	't' value	Level of Significance
Arts Students	145	161.09	18.72	4.26	2.02	238	2.10	Significant at 5% Level
Science Students	95	165.35	19.00					

Analysis: The researcher found from the 't-table' that the critical value of t with 238 degrees of freedom(df) at a 5% level of significance is 1.97 and the 1% level of significance is 2.60. Our calculated value of 't' is 2.10. Since 2.10 is greater than 1.97 and less than 2.60 ($2.10 > 1.97$; $2.10 < 2.60$) the difference between the two groups is significant at the 5% level.

Interpretation: Hence, the null hypothesis (H_{03}) is rejected and the alternative hypothesis is accepted. It means that there is a significant difference in attitude towards online education between the arts and science stream of education. The Science stream of students has a little greater positive attitude towards online education.

Hypothesis-4:

H₀₄: There is no significant difference in attitude towards online education among gender, locality, and stream of study of higher school students.

Table No 6: Attitude towards online education among gender, locality, and stream of study of higher school students

Source of Variance	df	Sum of Squares	Mean Square Variance	F calculated	F Tabulated at 5% and 1% level
Between Groups	2	263.27	131.63	0.35	Not significant at both level
Within Groups	717	266291	371.39		
Total	719	266554			

Analysis: From table- 6, it is found that the computed F- value (0.35) is less than the critical value of F for 2 and 717 df at both 5% and 1% level of significance.

Interpretation: Hence, the null hypothesis (H_{04}) is accepted and the alternative hypothesis is rejected. It indicates that there is no significant difference among the gender, locality, and stream of study of secondary students towards online education.

FINDINGS OF THE STUDY:

The following findings are given below obtain from the above statistical analysis and the interpretation

- There is no significant difference in attitude towards online education between boys' and girls' students of higher secondary school.
- There is a significant difference in attitude towards online education between rural students and urban students of higher secondary school. Also concluded that urban students have a greater positive attitude than rural students.
- There is a significant difference in attitude towards online education between the arts and science stream of education. Also concluded that the Science stream of students has a little greater positive attitude towards online education than Arts students.
- There is no significant difference among the gender, locality, and stream of study of higher secondary students towards online education.

CONCLUSION:

From the light of the above results and discussions, we can say that higher secondary school students of West Bengal attitude towards online education are more favorable. Although there is a lot of barriers to online education, the result showed that students can take classes online. So, the teachers, educationists, educational planners have to think that how can online education will be more attractive. Apart from this Covid-19 pandemic has opened a new era of online teaching and learning. During the covid-19 crisis based online teaching-learning process is a more vital role in the educational setting. Students can use online learning components in different ways to aid the teaching-learning process. (Nachimuthu, 2020)

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